

Impact on Student Learning Project

The “Impact on Student Learning” project provides an opportunity for candidates to closely examine their effect on students’ learning. There are three basic components to this project:

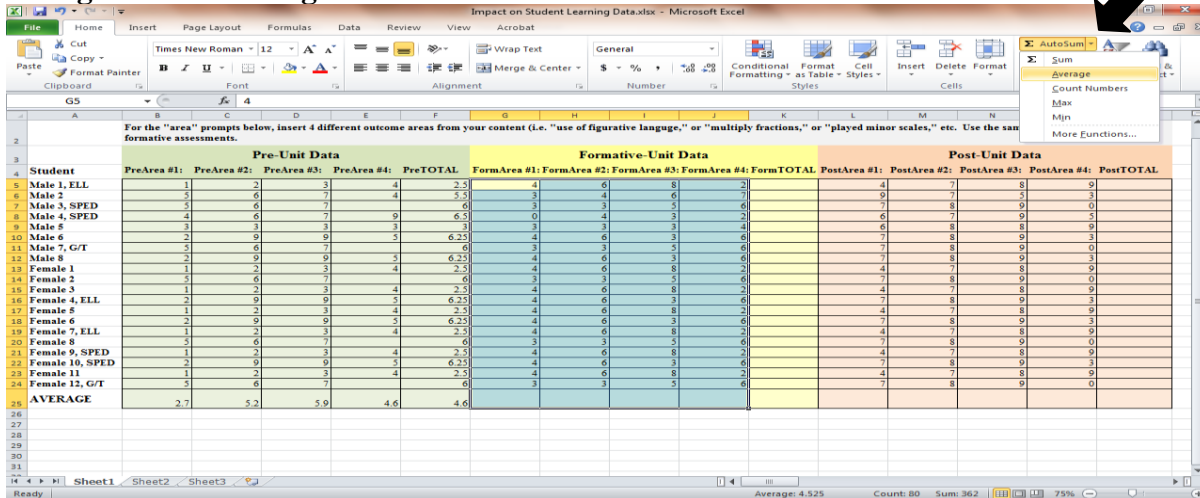
- 1) Samples of student work in pre/post/formative assessments from low, average, and high levels of performance;
- 2) Excel spreadsheet and graphs representing student performance data;
- 3) Reflection paper.

Using the student assessment (pre, post, and formative) data collected during implementation of the Unit Plan, you will conduct analyses in Excel and write a reflection paper on the impact of your instruction on students’ learning. Prior to implementing the unit, you will have conducted a pre-unit assessment and recorded that data in an Excel spreadsheet. During implementation of the unit, you will record in the same Excel spreadsheet data collected on formative assessments. Likewise, at the conclusion of the unit you will collect the post-unit assessment data and record it in the spreadsheet. *[A sample Excel template is available on the Internship II website, and additional training for conducting the required analyses is provided around mid-term.]*

Once you have your data recorded correctly in Excel, you are ready to examine your instructional effectiveness. Specifically, you are interested in examining the data to determine what you seem to have taught well, what areas you might want to strengthen in the future, and if all student populations appeared to have an equitable learning experience. To determine this, you first need to calculate the average performance for each assessed area.

*If you are unfamiliar with how to calculate averages in Excel, you may reference the screen shot below. Select the data you want averaged and extend the selection to the row/column where you want the average deposited. In the example below, the Formative Unit-Data is highlighted in blue. The highlighted selection is extended one row below the last student’s data—down through the “Average” row. With all the data selected and the row for the average selected as well, move your cursor to the Σ (Sigma symbol), and select “Average” from the drop down box. The average will automatically appear in the empty space selected (in this case, the “Average” row.) When you calculate the Total Average for each area, you will repeat the same process; however, instead of extending *down* to an empty row, you will extend your highlighted selection over to the empty column on the right of the selection.*

Using Excel to Average Data



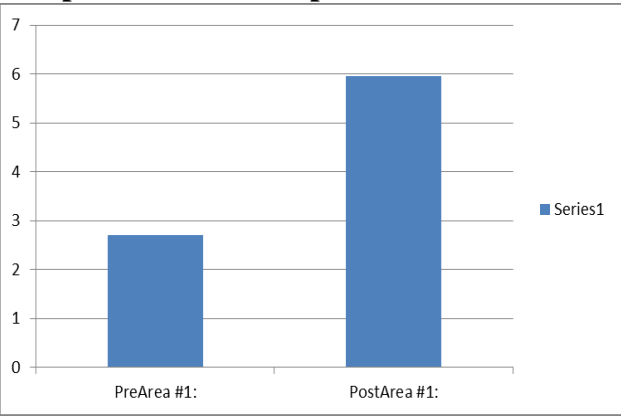
Student	Pre-Unit Data				Formative-Unit Data				Post-Unit Data			
	PreArea #1	PreArea #2	PreArea #3	PreTOTAL	FormArea #1	FormArea #2	FormArea #3	FormTOTAL	PostArea #1	PostArea #2	PostArea #3	PostTOTAL
Male 1, ELL	3	2	3	4	2.5	4	6	8	2	4	3	9
Male 2	5	6	7	4	3.5	4	5	6	3	5	8	9
Male 3, SPED	4	6	7	9	6.5	0	4	3	2	6	7	9
Male 4, SPED	3	3	3	3	3	3	3	4	6	8	8	9
Male 5	2	9	9	5	6.25	4	6	3	6	7	8	9
Male 6	3	6	7	6	3	3	5	6	7	8	9	0
Male 7, G/T	2	9	9	5	6.25	4	6	3	6	7	8	9
Male 8	1	2	3	4	2.5	4	6	8	2	4	7	8
Female 1	1	2	3	4	2.5	4	6	8	2	4	7	8
Female 2	1	2	3	4	2.5	4	6	8	2	4	7	8
Female 3	1	2	3	4	2.5	4	6	8	2	4	7	8
Female 4, ELL	2	9	9	5	6.25	4	6	3	6	7	8	9
Female 5	1	2	3	4	2.5	4	6	8	2	4	7	8
Female 6	2	9	9	5	6.25	4	6	3	6	7	8	9
Female 7, ELL	1	2	3	4	2.5	4	6	8	2	4	7	8
Female 8	1	2	3	4	2.5	4	6	8	2	4	7	8
Female 9, SPED	1	2	3	4	2.5	4	6	8	2	4	7	8
Female 10, SPED	2	9	9	5	6.25	4	6	3	6	7	8	9
Female 11	1	2	3	4	2.5	4	6	8	2	4	7	8
Female 12, G/T	5	6	7	4	6	3	3	5	6	7	8	9
AVERAGE	2.7	5.2	5.9	4.6	4.6							

Additionally, you will create charts to graphically represent the impact you had on student learning. You should at least the following graphs:

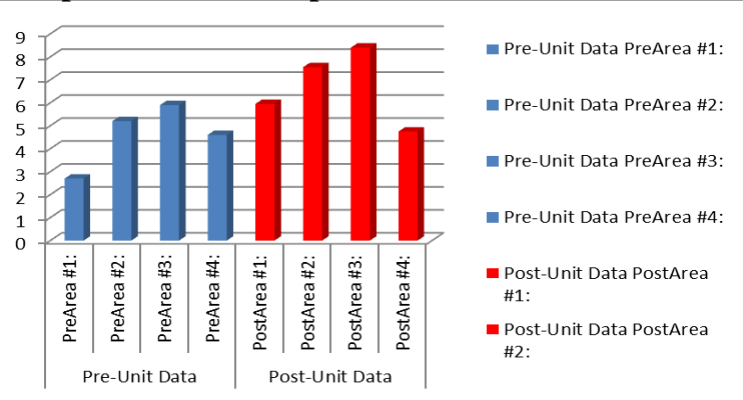
- comparison of pre/post data,
- representation of pre, formative, post data for the overall class,
- comparison of pre, formative, post data by student sub-population (male, female, ELL, SPED, G/T).

Below are *samples* of what these charts might look like. However, you should format your charts in a manner you feel best represents what you want to communicate about the data. You may want to experiement with a few options before you make your final selection.

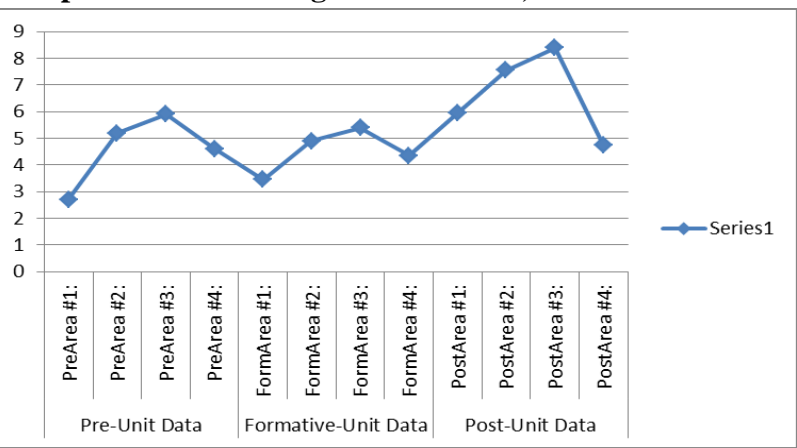
Sample: Pre/Post Comparison for Area #1



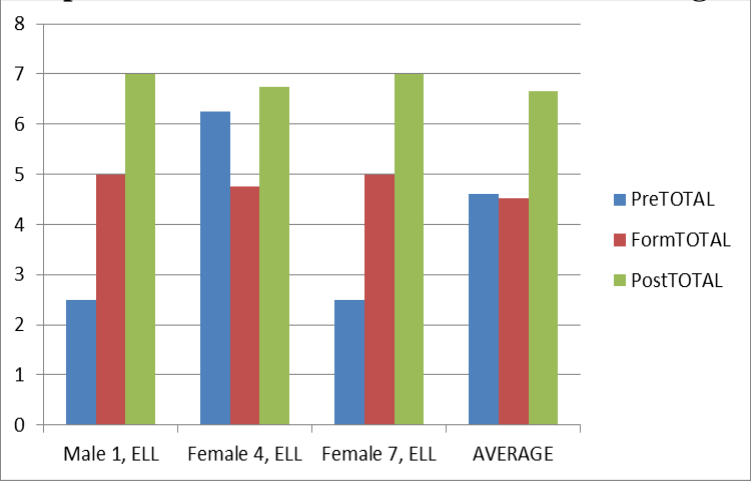
Sample: Pre/Post Comparison for All Areas



Sample: Overall Average for All Areas, Pre/Formative/Post



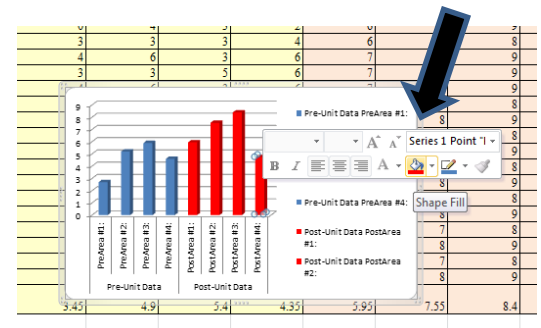
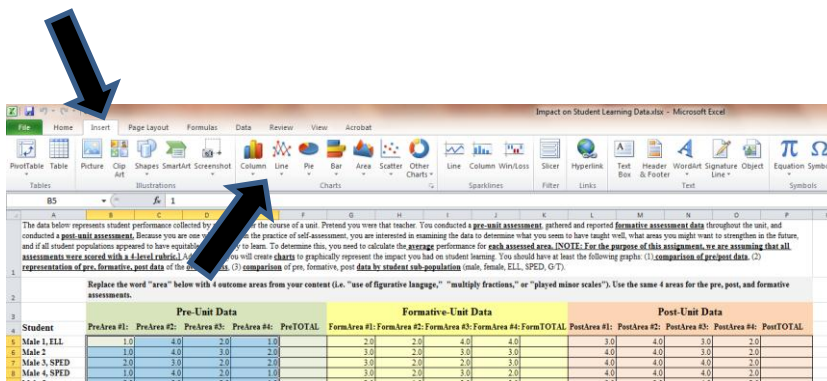
Sample: Data for ELLs and Overall Student Average



If you are unfamiliar with how to create charts in Excel, you may reference the screen shots below. You want to select the data and titles that you want represented in the chart. To select multiple cells that are not adjacent to one another, hold down the "control" key while you click the cells you wish to include. From there, click the "Insert" tab then select the type of chart you wish to produce. Once you have the chart generated, you may wish to change to alter some of its formatting. You can do this by right clicking on the chart and selecting the appropriate option from the menu that appears. Additional Excel help is attainable through the TLC, which is located in Mashburn 102. The phone number for the TLC is 501-450-3400.

Titles and Data Selected (highlighted in blue) for ELL Students and Overall Class Averages

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
2	For the "area" prompts below, insert 4 different outcome areas from your content (i.e. "use of figurative language," or "multiply fractions," or "played minor scales," etc. Use the same areas for the pre, post, and formative assessments.															
3	Pre-Unit Data					Formative-Unit Data					Post-Unit Data					
4	Student	PreArea #1:	PreArea #2:	PreArea #3:	PreArea #4:	PreTOTAL	FormArea #1:	FormArea #2:	FormArea #3:	FormArea #4:	FormTOTAL	PostArea #1:	PostArea #2:	PostArea #3:	PostArea #4:	PostTOTAL
5	Male 1, ELL	1	2	3	4	2.5	4	6	8	2	5	4	7	8	9	7
6	Male 2	5	6	7	4	5.5	3	4	6	7	5	9	7	5	3	6
7	Male 3, SPED	5	6	7	4	5.5	3	4	6	7	5	9	7	5	3	6
8	Male 4, SPED	4	6	7	9	6.5	0	4	3	2	2.25	6	7	9	5	6.75
9	Male 5	3	3	3	3	3	3	3	3	4	3.25	6	8	8	9	7.75
10	Male 6	2	9	9	5	6.25	4	6	3	6	4.75	7	8	9	3	6.75
11	Male 7, G/T	5	6	7	4	5.5	3	4	6	7	5	9	7	5	3	6
12	Male 8	2	9	9	5	6.25	4	6	3	6	4.75	7	8	9	3	6.75
13	Female 1	1	2	3	4	2.5	4	6	8	2	5	4	7	8	9	7
14	Female 2	5	6	7	4	5.5	3	4	6	7	5	9	7	5	3	6
15	Female 3	1	2	3	4	2.5	4	6	8	2	5	4	7	8	9	7
16	Female 4, ELL	2	9	9	5	6.25	4	6	3	6	4.75	7	8	9	3	6.75
17	Female 5	1	2	3	4	2.5	4	6	8	2	5	4	7	8	9	7
18	Female 6	2	9	9	5	6.25	4	6	3	6	4.75	7	8	9	3	6.75
19	Female 7, ELL	1	2	3	4	2.5	4	6	8	2	5	4	7	8	9	7
20	Female 8	5	6	7	4	5.5	3	4	6	7	5	9	7	5	3	6
21	Female 9, SPED	1	2	3	4	2.5	4	6	8	2	5	4	7	8	9	7
22	Female 10, SPED	2	9	9	5	6.25	4	6	3	6	4.75	7	8	9	3	6.75
23	Female 11	1	2	3	4	2.5	4	6	8	2	5	4	7	8	9	7
24	Female 12, G/T	5	6	7	4	5.5	3	4	6	7	5	9	7	5	3	6
25	AVERAGE	2.7	5.2	5.9	4.6	4.6	3.45	4.9	5.4	4.35	4.525	5.95	7.55	8.4	4.75	6.6625



Reflection Paper

Once you have your data averaged and charts created, you will write a reflection of your instructional effectiveness based on your interpretation of the data. The reflection paper should include careful responses to the questions below. Be certain to support your responses with evidence from the recorded data.

- Were the learning targets met by all students by the end of the unit?
- Were the learning targets attained equitably among the various student populations (male, female, ELL, SPED, G/T)?
- Were students appropriately prepared for the various assessments and assessment formats? Were appropriate modifications/accommodations made for students with exceptionalities and English language learner needs?
- Were there any patterns you noticed in the pre, formative, and/or post unit data that seemed curious?
- What impact did the feedback you provided students have on their achievement?
- Based on the data, what would you say are your instructional strengths?
- What areas for improvement can you identify for your instructional practice based on the student data?

RUBRIC—Impact on Student Learning

(Must score a “2” or better on each criterion. Any “1” received must be revised and resubmitted.)

Criteria	1—Unsatisfactory	2—Basic	3—Proficient
Data Spreadsheet and Charts <i>InTASC Standard 6.g</i>	Data spreadsheet missing and/or does not contain at least averages of student performance scores; and/or missing one or more charts representing the required information.	Data spreadsheet contains at least averages of student performance scores. Charts were presented for the three required areas; however, they may not have clearly communicated the intended information.	Data spreadsheet includes averages of student performance scores and additional descriptive statistics. Appropriate charts were presented to and clearly represent required information (pre/post comparison, class trend data on pre/formative/post data, data comparison among student subpopulations).
Samples of Student Work/Written Feedback and their Impact <i>InTASC Standard 6.c; 6.i; 6.j; 6.o</i>	Candidate did not provide samples of student work at all 3 levels *and* documentation of feedback given to students.	Candidate provided samples of student work at all 3 levels *and* documentation of feedback given to students.	Candidate provided samples of student work at all 3 levels *and* documentation of feedback given to students. Feedback was substantive and clearly constructed to improve student learning.
Reflection Paper—Data Trends, Analysis of Student Learning and Subpopulations <i>InTASC Standard 6.b; 6.f; 6.l</i>	Candidate analysis of student learning does not include supportive evidence from data collected and/or does not include trend analysis of learning goals among subpopulations. Responses to 2 or more of the 7 assignment prompts are missing.	Candidate provides substantive discussion of student acquisition of learning goals (with supportive evidence from student data), but does not represent thorough interpretation of student trends and impact on various subpopulations.	Candidate provides thoughtful examination of trends in the student data and careful analysis of student acquisition of learning targets—including that of various student populations. Well-developed responses were provided for all 7 assignment prompts.
Reflection Paper—Teacher Efficacy <i>InTASC Standard 6.b; 6.n; 9.h; 9.l</i>	Reflection paper does not provide meaningful discussion of strengths/areas for improvement; does not indicate use of data to guide planning; and/or does suggest candidate’s ownership of student learning.	Reflection paper provides generic discussion of strengths/areas for improvement and how such data analysis guides planning. Ownership of student learning is generally evident.	Reflection paper indicates strong presence of teacher efficacy through description of strengths and areas for improvement. Candidate clearly articulates the role of student data analysis to guide planning and instruction.